



Virginia Department of Health
“Water you Drinking?”
Situation Manual

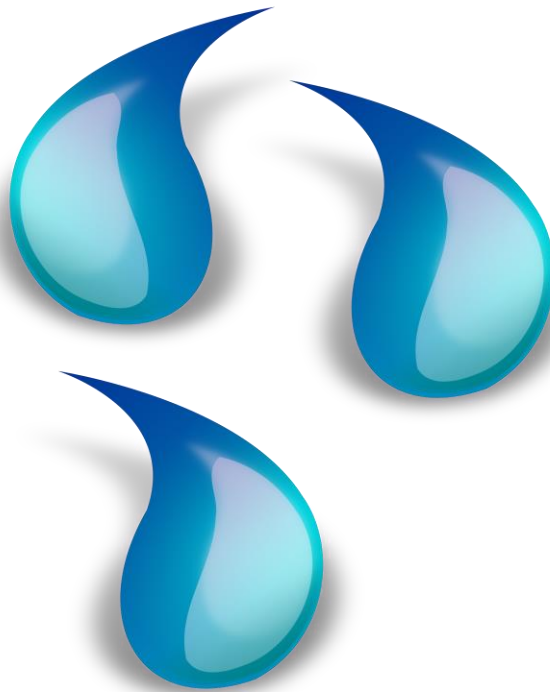


Table of Contents

Introduction	3
Purpose	3
Overview	3
Participants	3
Exercise Objectives	4
Exercise Structure	4
Exercise Guidelines	5
Roles and Responsibilities	5
Module 1 – Identification of the Incident	6
Water Scenario	6
Task	7
Questions for Participant Groups	8
Module 2 – Identification of Response Actions	10
Water Scenario	10
Task	11
Questions for Participant Groups	11
Wrap-Up(Hot Wash) Activities	13
Appendix A: Resources	14
Appendix B: Acronyms Used	16
State Agencies/Offices Fact Sheets	
Virginia Department of Health Organizational Chart	

Table of Contents

Introduction

Introduction

Purpose

To protect the health of the American public, it is crucial that we ensure that drinking water is safe for use by everyone. Everyone involved in the treatment, storage and distribution of water is responsible for ensuring the safety of our water supply.

The U.S. Environmental Protection Agency (U.S. EPA) serves as the Sector Specific Agency for the Water Sector, assisting drinking water and wastewater utilities in preparing to respond to and recover from all-hazards that may negatively impact the utilities ability to treat and transport safe water. Local water utilities face several threats as well, that may result in contamination of water supplies arising from intentional contamination, or accidental spills, leaks, floods, broken mains, fraud or terrorist acts. Despite these threats, waterworks, regional/state primacy agencies, water associations, local health districts, EPA, the U.S. Centers for Disease Control and Prevention (CDC) and the US Army Corps of Engineers (USACE) continue to work together to protect human health and the environment with clean and safe water.

Providing water and food safety involves establishing and maintaining strong relationships between multiple regulatory agencies at local, state and federal levels. In light of a water contamination event that affects food and agricultural products, it is incumbent upon participating agencies to understand their roles and responsibilities.

This situation manual (SITMAN) begins with an overview of the water sector. The scenario is situated in a small town and addresses the need to coordinate regulatory and response resources during a water contamination event.

Overview

Presidential Policy Directive-21 (PPD-21) designates the U.S. Environmental Protection Agency (U.S. EPA) as the federal lead for the Water Sector's critical infrastructure protection activities. Many resilience activities are carried out in coordination between the Agency and EPA's Water Sector partners.

The Water Sector is vulnerable to a variety of attacks through contamination with deadly agents, and physical attacks. (.Resulting illness or casualties and/or the potential for lack of access to a safe water supply would impact both public health and local and regional economies. Critical services such as firefighting or healthcare and other dependent and interdependent sectors, such as Energy, Transportation Systems, and Agriculture and Food, would be negatively impacted by any event that limits access to a safe water supply.

Participants

Through the collaboration and coordination with multiple stakeholders, many will benefit from participating in this scenario. We encourage as many of the following groups as possible to participate in this exercise so that they

Introduction

can contribute to the overall understanding of the scenario, develop and/or strengthen working relationships with other agencies and benefit from the collective dialogue.

The Food and Agriculture Sector has critical dependencies with many sectors, but especially with:

- Water, for clean irrigation and processed water;
- Transportation Systems, for movement of products;
- Energy, to power the equipment needed for agriculture production and food processing; and
- Banking and Finance, Chemical, Dams, and other sectors as well.

Participants in this scenario could include, local and regional staff of the Virginia Department of Health (VDH) Office of Drinking Water (ODW), local water works, local health districts, public information officers, Department of Emergency Management (VDEM), Department of Environmental Quality (DEQ), public health epidemiologists, and environmental health professionals, laboratories and food industry, medical reserve corps, law enforcement, Department of Conservation and Recreation (DCR) and Department of Agriculture and Consumer Services (VDACS).

Exercise Objectives

At the conclusion of this tabletop exercise, participants will be able to:

- assess lines of communication between agencies
- identify interdependencies between different agencies;
- assess agency capabilities and resources;
- determine stakeholder's roles and responsibilities.

Exercise Structure

This exercise is designed to be an interactive, facilitated tabletop exercise. Participants are encouraged to learn from each other and ask questions of one another. The scenario is based on a real situation and has been designed by a group of subject matter and instructional design experts to provide participants with a real life, plausible water safety scenario. While this scenario has been simplified in order to present the information in an effective way, the scenario itself and the discussion questions have been designed to encourage participant dialogue and to surface topics that are critically important to reacting to such incidents.

The exercise contains two modules and has been developed to provide participants with an opportunity to explore important topics such as interagency collaboration, jurisdictional issues and risk communication.

- **Module 1** – Identification of Incident
- **Module 2** – Identification of Response Actions

Introduction

After the exercise, a Wrap-Up (Hot Wash) discussion, will allow participants to provide feedback about the exercise. As a bonus, this activity can be offered as an exercise by providing an After Action Report (AAR) (See *AAR Template at Additional Resources on CBERS 2017: “Water You Drinking?” webpage follow the link <http://www.vdh.virginia.gov/emergency-preparedness/cbers2017/>*).

This exercise was initially developed jointly by EPA and Food and Drug Administration (FDA) and was revised by VDH, DEQ, and VDACS.

Exercise Guidelines

This exercise will be conducted in a safe learning environment so that all participants can share and explore concepts with one another while discussing multiple solutions and options for a given issue. It will operate under the following guidelines:

- This will be an open, low-stress and non-public learning environment and is not intended to set precedents.
- Participants are expected to listen to and respect the varying viewpoints of all of the other participants.
- The scenario is plausible and the events could occur as presented. Suspend your disbelief and feel free to discuss differing policies and procedures during the breakout discussion.
- Today's facilitator is not necessarily a subject matter expert, and participants are expected to provide the expertise needed to ensure that our discussion is accurate and thorough.
- We will apply findings from today's activities to our job/functions and share key findings with colleagues.

Roles and Responsibilities

Facilitator – Generally leads the exercise, provides situation updates and moderates discussions. Facilitators also provide additional information and resolve questions as needed. Key officials may also assist with the facilitation as subject matter experts during the exercise. Ensure that the groups abide by the exercise timetable.

Participants – Respond to the scenario based on their first-hand, experiential knowledge; current plans and procedures of their individual entity, agency or jurisdiction; and insights from training and experience.

Group Leader – Representative from each table, volunteered by the group, who will lead the group as it explores discussion questions and the breakout activities.

Group Recorder/Reporter – Representative from each table, volunteered by the group, who will ensure that the group discussions are kept on time; record the key themes discussed at the table; and will be responsible for reporting out during the large group dialogue.

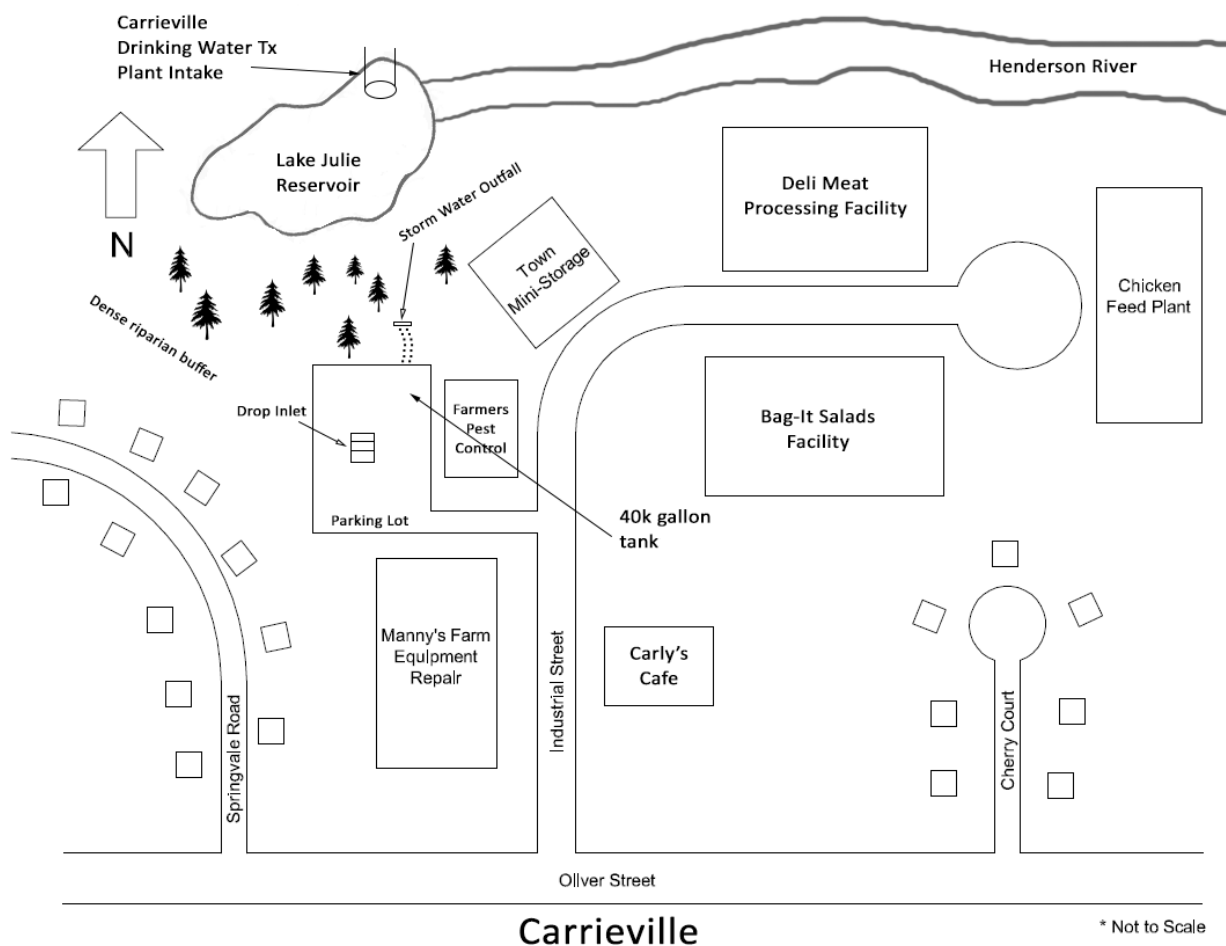
Module 1 – Identification of the Incident

Module 1 – Identification of the Incident

Day 1 / Friday Time: 12:20 p.m.

It is early spring afternoon in the small town of Carrieville, Virginia (population 24,400; 9000 households and 100 businesses). A local industrial park houses a number of tenants, including a chicken feed manufacturer, a manufacturer of herbicides, a café, a self-storage facility, a deli-meat processing facility, a farm-equipment repair shop, and a bag salad facility (See map below).

Taking advantage of the end-of-the-week timeframe and anticipated low water demand, the Carrieville local water utility prepares to turn off the water for planned after-hours maintenance on the industrial park's water main. The location of this work is about a quarter mile down Industrial Street; past the café but before the deli meat processing facility. Shortly after 5:00 PM, water department workers shut the water supply off to begin the scheduled repairs. When repairs are complete on the water main, the local water utility re-pressurizes the line and departs.



Module 1 – Identification of the Incident

Day 4 / Monday Time: 6:00 a.m.

The café opens up early to brew coffee and bake muffins for arriving workers at the industrial park. As a worker runs water to begin filling coffee makers, she notices a strong chemical odor. She calls her supervisor, who decides to call the local water utility to find out what is going on. The water was fine on Friday, and no one has been in the shop during the weekend.

The local water utility reviews its files, and realizes that after-hours scheduled maintenance was performed in the industrial park on Friday evening. The local water utility also reviews its customer complaint calls received during the weekend and into Monday morning, but has no record of relevant complaints. The local water utility sends a field crew to the cafe to investigate and to potentially collect water samples. At the same time, the local health department has also not received any complaints that tie directly to the café during the weekend.

As part of the investigation, the field crew arrives at the cafe and verifies the strong chemical odor and begins to collect water samples for laboratory analysis. The local water utility calls ODW to alert them of the situation and to seek advice. It has been identified that the water supply system of the town may have been affected. ODW contacts the local water utility that oversees the jurisdiction of Carrieville. After consultation, the local water utility issues a “Do Not Use” notification to the residents of the industrial park and surrounding areas.

Note: About water use advisories.

If there is a water quality problem, and it involves a Safe Drinking Water Act-regulated contaminant, the local water utility follows the Public Notification Rule to inform the public of the problem and provide instructions on what to do. Water use advisories can range from boiled water notices to not drinking or using the water. Because water use advisories cause great inconvenience for customers and can affect the local economy (restaurants and other businesses may have to close), water utilities take their public notification responsibilities very seriously and want to ensure that they are issuing the correct notification in a timely fashion.

Advisory Definitions:

Boiling Water Advisory- Boiled or bottled water should be used for drinking, beverage and food preparation, and making ice until further notice. Boiling kills bacteria and other organisms in the water. Boiling is the preferred method to assure that the tap water is safe to drink.

Do Not Use- Unknown chemical substances may have contaminated our drinking water. Until we can investigate further and have the water tested, avoid all contact with the tap water. Only bottled water should be used for all drinking, beverage and food preparation (including baby formula and juice), making ice, brushing teeth, washing dishes or clothes, washing hands, and bathing until further notice. **DO NOT TRY TO TREAT THE WATER YOURSELF.** Boiling, freezing, filtering, adding chlorine or other disinfectants, or letting the water stand will not make the water safe.

Task

Use your allotted time to consider the developments and questions assigned to your group for Module 1.

- Identify any additional requirements, critical issues, decisions, and questions you think should be addressed at this time.

Module 1 – Identification of the Incident

- Unanswered questions should be recorded for discussion with the entire group.

Questions for Participant Groups

Waterworks/Industries

1. What Standard Operating Procedures (SOP) are in place if the water becomes contaminated? What kind of QA verification is performed?
2. What are the impacts of an interrupted water supply to food/feed companies, retail establishments, and other facilities? What (if any) environmental impacts might an interruption cause?
3. How would the customers of water use be notified about an interruption of water service on Day 1? Whose responsibility is it to make these arrangements about interruption of water service?
4. Are food/feed companies, retail establishments, and other food firms required to have alternate water plans? Or does production and processing just stop?
5. Are there residential and/or businesses, within the public water supply system that could potentially be affected? What public health awareness messages are included in your alternate water plan? Explain how you would deliver these messages to the public?
6. What social media protocols are in place? Who is responsible for posting messaging and notifications to customers?
7. Who is involved in this investigation? With whom might you collaborate with in this investigation?
8. What is your plan to provide alternate water to customers during the “Do Not Drink” water use advisory in your community? Whose responsibility is it to provide alternate drinking water?
9. What are your social media protocols? Who is responsible for posting messaging and notifications to customers?

Local /Regional Entities

1. What measures would DEQ take to assess the impact to the source water contamination?
2. What are your Standard Operating Procedures (SOP) for an incident that involves contaminated water? Would isolation of the system be an option, and what are the ramifications from this action?
3. Are you able to determine if it is intentional or unintentional contamination incident? How does this decision affect your notifications and actions? Your precautions?
4. When, if at all, would you notify local emergency management?
5. When would the local waterworks notify the state ODW? Who would notify the state ODW? What support is expected from ODW?
6. What kind of surveillance and investigation would the local health department perform?
7. Who should be part of the Incident Command Structure (ICF)?

State/Federal Agencies

1. What state regulatory agencies should be notified and whose responsibility is it to notify them about the potential risk?
2. What state agencies would get involved in the investigation?
3. How would you deliver messaging to the public concerning flushing lines? Who is responsible for delivering that information?
4. What capabilities can each agency provide and what resources are needed to manage the incident effectively?
5. If there is perceived value in establishing working relationships between food/feed production companies and water suppliers, what can the agencies do to encourage this interaction?

Module 1 – Identification of the Incident

6. Whose responsibility is it to notify ODW of the water contamination? Whose responsibility is it to notify FDA, USDA, FSIS(Food Safety and Inspection Service) and state and local regulatory agencies about the potential risk to food?

Module 2 – Identification of Response Actions

Day 4 / Monday Time: 7:45 a.m.

As a part of their ongoing investigations and while awaiting laboratory results from the collected samples, the local water utility along with environmental health personnel begin door-to-door interviews with the other tenants of the industrial park. They are looking for any other signs of water quality problems or any other unusual activity that might help to explain the chemical odor in the water at the café. In the meantime, local water utility is beginning to receive complaints from customers in other areas of town.

When the local water utility interviews the manufacturer of herbicides provider, the company relates a strange incident that occurred. They state that on Friday one of their workers was mixing a highly concentrated glyphosate-based herbicide mixed with MethylEthylBad and water (total 40,000-gallons) in preparation for distribution to spraying contractors on Monday morning. The herbicide mixture was in a 40,000-gallon tank Friday night at close of business; however, on Monday morning, the tank was empty. Closer inspection revealed that a tank drain valve was in the open position. The company reviewed their security camera video footage. The footage showed two young boys entering the property and looking around, and one camera showed the boys in the vicinity of the herbicide tank. Law enforcement quickly determined that this was not an act of terrorism.

Meanwhile, discussions continue among local and state officials (e.g. local public health, local emergency management and city government). The local public health department notifies the state of the issue while still trying to get a grasp on the scale and scope of the event. Law enforcement is now involved in investigation. Therefore, three separate lines of inquiries are being conducted at the same time – by the water department, the health department, and by law enforcement agencies.

News seems to travel fast in the local town about the water potentially being contaminated. Businesses that use water want to know if their services will be affected by the water and if they need to close their doors for business. Nearby residential areas are concerned about drinking potentially contaminated water. Some residents report having seen dead fish along the banks of the Henderson River which runs through the town. Suspecting source water contamination, Do Not Swim and Do Not Fish signage has been posted in affected areas.

Day 5 / Tuesday Time: 8:15 a.m.

Based on what they learned on Monday, the local water utility and regional office of ODW are able to significantly narrow the analytical scope being performed by the laboratory. Lab results soon reveal concentrations of the herbicide at 5.7 parts per billion (ppb) in the water supply in the impacted area. No one gets tainted coffee from the café, but the chicken feed manufacturer and the deli meat processing plants are 24-7 operations that were in full production during the weekend, and the bagged salad processor ran a limited production line on Saturday.

Investigation reveals that the teens seen on security video footage were part of a prank that caused the contents of the herbicide tank to flow from the tank into a secondary containment structure, out of the containment structure (due to an unsecured valve), and into a storm drain inlet. The storm drain inlet feeds a storm water line that flows north and empties into the Henderson River above the water intake for the town of Carrieville's water supply. Do Not Drink advisory has been issued.

Module 2 – Identification of Response Actions

Note: About Glyphosate.

Glyphosate is an organic solid of odorless white crystals. It is a non-selective herbicide used on many food and non-food crops as well as non-crop areas such as roadsides. Some of the possible health effects associated with glyphosate in drinking water: if drinking water containing glyphosate well in excess of the maximum contaminant level (MCL) for many years could experience problems with their kidneys or reproductive difficulties.

For more information see the EPA website <https://safewater.zendesk.com/hc/en-us/sections/202366358>

Note: About MethylEthylBad.

MethylEthylBad is a surfactant with a distinct plastic-like odor. It has a particularly low odor threshold.

Task

Use your allotted time to consider the developments and questions assigned to your group for Module 2.

- Identify any additional requirements, critical issues, decisions, and questions you think should be addressed at this time.
- Unanswered questions should be recorded for discussion with the entire group.

Questions for Participant Groups

Waterworks/Industries

1. Who is currently involved in the investigation? What surveillance equipment and records management process do you have in place that would support this investigation?
2. If your product is implicated in a food/feed contamination event, how quickly can you identify the upstream sources of the raw materials or ingredients that you use? Not just one step back, but more comprehensively back to the agricultural origins?
3. What information needs to be communicated between the commercial food/feed companies and their water service suppliers and vice versa?
4. Your facility or water works piping may have been impacted by contaminated water. What actions would you take to ensure you have adequately remediated any potentially contaminated piping and/or equipment? Do you have plans that address this?
5. Your business may have used contaminated water in the production of your product over the weekend. What actions would you take with respect to your finished product? Do you have a plan for addressing a product recall? With whom would you need to coordinate?

Local/Regional Entities

1. How long would it now take to get definitive laboratory identification for the contaminant in the water?
2. Would you change or initiate a water use advisory once the contaminant was identified?
3. How would advisories change, should the contaminant be one not regulated under the Safe Drinking Water Act?

Module 2 – Identification of Response Actions

4. What is the plan for rehabilitating the water distribution system in the industrial park? Is it safe or allowable to flush water into the street drains in this example?
5. What agency certifies that the water mains are “clean” again and safe to use to distribute water?

State/Federal Agencies

1. How do media relations work and who speaks to the media? What about the use of social media?
2. Who would analyze samples, using what media, looking for what, and how long would it take to get the results? How are lab results shared? What lab capabilities can each agency bring to the table?
3. What messaging should be enacted to address public health concerns?
4. What coordination needs to take place between EPA and FDA (including ODW, DEQ), Emergency Support Functions (Public Health and Medical Services) and (Agriculture and Natural Resources)?
5. What coordination needs to take place between FDA and USDA FSIS in regards to ESF #3(Public Works & Engineering), ESF's #8(Public Health and Medical Services) and #11(Agriculture and Natural Resources)?
6. Would potentially contaminated food need to be destroyed? Who would ensure that this task is done properly?

Appendices

Wrap-Up (Hot Wash) Activities

We will spend the remaining time synthesizing what we discussed today, identifying important action steps to include in your work plan and obtaining your feedback on the overall exercise. An After – Action Report and Improvement Plan (AAR/IP) is an important tool used to evaluate the exercise addressing outcomes, strengths, weaknesses, and lessons learned. For AAR/IP Template (See *AAR Template at Additional Resources on CBERS 2017: “Water You Drinking?”* webpage follow the link <http://www.vdh.virginia.gov/emergency-preparedness/cbers2017/>).

At your table, please take a few minutes to discuss the questions below, as directed by the facilitator. We will then take some time as a large group to identify common themes and takeaways. At the conclusion of this discussion, we ask that you complete the evaluation form that will be provided by your facilitator.

1. From participating in this exercise, did you recognize any gaps in your work plans? If so, what are they? What gaps can you start working on upon returning to your organization?
2. What is the most important thing you learned today in terms of managing a contamination incident that impacts the food and agriculture and water sectors?
3. What information do you need to make informed decisions during such an event? If you don't have that information, how do you get it or what needs to be done to make a decision without it?
4. Do you think this exercise will prompt your organization to evaluate your protocols, policies, and procedures?
5. What top three actions should be taken to ensure proper event management based upon what you have learned from this exercise?
6. What went right and what can you improve on at each stage of the contamination investigation?

Appendices

Appendix A: Resources

American Water Works Association Virginia Section

<http://www.vaawwa.org/>

CDC. Drinking Water Advisory Communication Toolbox

<https://www.cdc.gov/healthywater/emergency/dwa-comm-toolbox/>

CDC. Foodborne Outbreak Investigations.

<http://www.cdc.gov/outbreaknet/investigations/investigating.html>

CDC. National Outbreak Reporting System. Guidance document for NORS users.

http://www.cdc.gov/outbreaknet/pdf/NORS_Guidance_5213_06232009%28compliant%29.pdf

CDC. Multistate outbreak of *E. coli* O157:H7 infections from spinach.

<http://www.cdc.gov/ecoli/2006/september/>

CIFOR manual; Diagnosis and Management of Foodborne Illnesses: A Primer for Physicians and Other Health Care Professionals <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5304a1.htm>;

<http://www.cifor.us>.

DCLS Approved Water Testing Labs <http://www.dgs.virginia.gov/LinkClick.aspx?link=508&tabid=520>

DCLS Certified Laboratories and Tests Performed

<http://www.dgs.state.va.us/LinkClick.aspx?fileticket=eMhrTAJCyGw%3d&portalid=0>

EPA Containment and Disposal of Large Amounts of Contaminated Water

<https://www.epa.gov/sites/production/files/2015-06/documents/comntainmentanddisposal.pdf>

EPA Public Notification Handbook.

http://www.epa.gov/ogwdw/publicnotification/pdfs/guide_publicnotification_pnhandbook.pdf

EPA Planning for an Emergency Drinking Water Supply

http://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=520519

EPA Sampling Guidance for Unknown Contaminants in Drinking Water

https://www.epa.gov/sites/production/files/2017-02/documents/sampling_guidance_for_unknown_contaminants_in_drinking_water_02152017_final.pdf

EPA Water Security Handbook

Appendices

http://www.epa.gov/watersecurity/pubs/water_security_handbook_rptb.pdf

Epi-Ready Foodborne Illness Response Strategies http://www.neha.org/epi_ready/

FDA U.S. Food & Drug Administration: Food Related Emergency Exercise Bundle (FREE-B) Download
<http://www.fda.gov/Food/FoodDefense/ToolsEducationalMaterials/ucm295903.htm>

Hedberg, CW et al. 2008. Timeliness of enteric disease surveillance in 6 US states. Emerging Infectious Disease. 14(2):311-313

IAFP. Procedures to Investigate Foodborne Illness <http://www.foodprotection.org/files/other-publications/procedures-forms.pdf>

VDH: ODW Drinking Water, Boil Water Advisories <http://www.vdh.virginia.gov/drinking-water/office-of-drinking-water/information-for-waterworks-owners/emergency-planning-tools/>

2014 Freedom Industries HCHM

[West Virginia Homeland Security and Emergency Management After Action Review](#)

[US Chemical Safety and Hazard Investigation Board Investigation Report](#)

Appendices

Appendix B: Acronyms Used

AAR	After-Action Report
AAR/IP	After-Action Report and Improvement Plan
CDC	Centers for Disease Control and Prevention
CFSAN	FDA Center for Food Safety and Applied Nutrition
CIFOR	Council to Improve Foodborne Outbreak Response
CVM	FDA Center for Veterinary Medicine
DEQ	Department of Environmental Quality
DEE	VDH: Division of Environmental Epidemiology
EPA	Environmental Protection Agency
EPI	VDH: Office of Epidemiology
ESF	Emergency Support Function
FDA	Food and Drug Administration
FDECS	FDA CFSAN Food Defense and Emergency Coordination Staff
ODW	VDH: Office of Drinking Water
PPD	Presidential Policy Directive
SITMAN	Situation Manual
TTX	Tabletop Exercise
USACE	United States Army Corps of Engineers
USDA FSIS	United States Department of Agriculture Food Safety Inspection Service
VDACS	Virginia Department of Agriculture and Consumer Services
VDH	Virginia Department of Health
WARN	Water and Wastewater Agency Response Network



“Water you Drinking?” Fact Sheets





Office of Drinking Water

The mission of the Office of Drinking Water is to protect public health by ensuring that all people in Virginia have access to an adequate supply of clean, safe drinking water that meets federal and state drinking water standards.

The Office of Drinking Water (ODW) accomplishes this mission by:

1. serving as Virginia's advocate for safe drinking water
2. monitoring drinking water quality
3. applying engineering judgment
4. providing technical assistance and training with respect to all drinking water issues
5. financing improvements to drinking water systems, seeking funding sources for drinking water projects
6. enforcing drinking water regulations and standards of the Virginia Public Water Supply Law and the federal Safe Drinking Water Act

ODW comprises five Field Offices which support the Local Health Districts. These Field Offices work directly with the waterworks, inspecting for compliance as well as giving guidance when needed. ODW helps waterworks who apply for funding improvements through the State Revolving Fund (SRF).

ODW also has several Central Office Divisions.

ODW's Division of Capacity Development provides direct technical assistance to waterworks through planning and design funded projects, small projects engineering services, training, and one on one assistance to the local water utility.

ODW's Technical Services Division provides guidance to waterworks on compliance with the "Safe Drinking Water Act" regulations. Technical Services also does design review and application of treatment technologies.

ODW's Training, Security, Outreach and Emergency Preparedness division helps to ensure waterworks operators have access to the most up to date opportunities for training. Staff also:

- helps waterworks prepare Emergency Response Plans (ERP)
- organizes the VEOC ESF#3 response when needed
- assists with Vulnerability Assessments and Security Assessments for water utilities
- responds to emergency incidents when a Subject Matter Expert is requested or deemed needed
- hosts, organizes and facilitates waterworks exercises and / or trainings and conferences

During an Emergency, Incident or Event ODW is able to assist the waterworks with guidance, critical expertise, Emergency Preparedness Planning, helping to find resources or services to recover from and mitigate situations. ODW is also the State Primary lead for the Virginia Emergency Operations Center (VEOC) Emergency Support Function #3 (ESF#3) Public Works and Engineering, this allows ODW to champion water utilities' needs during an emergency.

ODW provides many useful tools on our VDH web page at (<http://www.vdh.virginia.gov/drinking-water/>) that can be used for planning, training or response needs.





Waterworks After-Hours Emergency Call Center # 1-866-531-3068

This number is provided for Waterworks, and Waterworks owners who have an after-hours emergency or need to reach VDH/ODW, during non-business hours. This is a 24hr Call Center that will take all pertinent information, and will contact appropriate ODW staff. ODW Personnel will return your call in a timely manner. Call 911 immediately if the situation requires fire, police, emergency medical providers, or hazardous materials responders.

DEQ and Drinking Water

DEQ protects and enhances Virginia's environment, and promotes the health and well-being of the citizens of the Commonwealth. DEQ plays a role in protecting Virginia's drinking water sources by fulfilling a set of core responsibilities in key areas including: monitoring, permitting, inspections and investigations, and compliance and enforcement.

CORE RESPONSIBILITIES

Monitoring	Permitting	Inspections & Investigations	Compliance & Enforcement
			
MONITOR AIR, LAND AND WATER & SHARE DATA WITH STAKEHOLDERS	ISSUE PERMITS PROTECTIVE OF PUBLIC HEALTH & ENVIRONMENT	INSPECT & INVESTIGATE SOURCES OF POLLUTION TO	TAKE COMPLIANCE & ENFORCEMENT ACTIONS AGAINST NON-COMPLIANT
Monitor Virginia's rivers, lakes and tidal waters annually by collecting and analyzing samples for > 130 pollutants. Support determinations on whether waters can be used for swimming, fishing and drinking.	Regulate water pollution in Virginia by issuing various types of permits for discharges of pollutants to state waters from point source and non-point source discharges.	Conduct routine inspections of permitted facilities and investigate reports of pollution-related incidents submitted by responsible parties, citizens, NGOs, and local, state and federal partners.	Execute compliance and enforcement actions that are effective, timely and appropriate, consistent and certain, fair and reasonable. Bring parties subject to a violation into compliance and preclude continuing violation.

POLLUTION RESPONSE PROGRAM

- Available 24-hours via Virginia Department of Emergency Management's (VDEM) Watch Center: 800-468-8892
- Maintains PREP Coordinators in six regional offices across the state for the investigation of pollution incidents.
- Investigates pollution-related incidents to determine pollution sources and responsible parties.
- Investigates large-scale fish kills.
- Notifies other state agencies and localities about pollution-related incidents, as necessary.
- Notifies VDH's Office of Drinking Water and downstream water intakes of pollution impacts to surface waters.
- Serves as the State On-scene Coordinator (SOSC) when a unified command is formed in response to a significant pollution event; this role is shared with VDEM when immediate hazards to life and property are present.
- Maintains a close working relationship with EPA's Federal On-Scene Coordinators (FOSCs) assigned to Virginia.
- Provides regulatory and technical support to responsible parties and localities in the management of pollution incidents.
- Maintains limited capacity to engage cleanup/response contractors when responsible parties are unknown, unwilling or incapable in responding to pollution incidents.



Virginia Department of Agriculture and Consumer Services/ RRT Response

The VA RRT Coordinator is informed of the situation by either: Local emergency services operator, the Emergency Operation Center (EOC), local health departments or VDACS agency partners.

The RRT Group meets (by email, phone calls and/or conference calls to determine activation status).

Activation of the RRT is required in situations where food, feed or an establishment(s) that sells, distributes, and/or manufactures those products has been indicated as a threat to public health that extends beyond the ability of the core group to mitigate and address or when other circumstances indicate that activation is necessary. Activation of the Rapid Response Team will be based upon a joint determination of the Core Group and it is the responsibility of the RRT Coordinator and staff to receive and catalog all information about the incident from the responding agencies/personnel.

The RRT Coordinator will be responsible for providing updated, summary emails to the Core Group whenever new or important information about the event, response, or recovery are received.

Whenever there is a full activation of the Virginia Rapid Response Team, ICS procedures will be utilized to coordinate actions and manage the work done by the response team. At a minimum, ICS will be utilized by staff within the VDACS Food Safety Program. Trained staff members will be assigned to various positions within the ICS structure based upon their ICS experience/training, the scope of the incident, and the product(s) involved. In all instances where VDACS is the sole agency utilizing ICS principles, the RRT Coordinator will be assigned as the Incident Commander. The RRT Coordinator may deploy VDACS Field Staff to the event with a specific set of instructions. These instructions will include required response activities, safety precautions and guidance on Public Alert notices and remediation activities. VDACS Food Safety, Ag Commodities and Dairy Program staff would be deployed to visit the affected firms in the area, meet with the firm management team to discuss all public warnings and notices determine if the firm can comply by using an alternate potable water source and /or discontinuing operations until the warnings and notices have been lifted. The VDACS field staff would require DO NOT USE notices be posted on certain equipment within the facility and review the firms remediation plan for flushing, cleaning and sanitizing once the notices and alerts have been lifted. The RRT Coordinator may require the firm to notify the field staff of completion of the remediation process (flushing and sanitizing) and provide documentation from testing to assure the water supply is safe and the mitigation strategy was successful. All VDACS Field Staff will report directly back to the RRT Coordinator during the event.

During the response, communications may expand beyond just the RRT Core Group as incidents unfold and more agencies become involved in response. When that occurs, the RRT Coordinator will assume the duty of informing those new groups of the communications procedures that need to be followed, give a general introduction to the RRT, ICS structure and response activities related to the incident. In most large events, there will be Joint Command Structure implemented for event response. The Joint Command may involve RRT Core Team members from: VDH, VDACS, FDA, USDA and other federal/state/local agencies.

The Coordinator will also be responsible for communicating any information provided by these auxiliary personnel/groups to the remainder of the RRT. Communication as described above for formal incidents will continue until the membership of the RRT Core Group determines that the event has been mitigated to a degree that full involvement of the team is no longer warranted.

At that time the RRT Coordinator will distribute an email to all personnel (RRT and auxiliary) who have been involved in the incident notifying them of the decision to step down response and return to routine or informal communications. All individuals will be asked at that time for any information or reasoning for which the full response should not be stopped. If none is provided then operations will return to normal.

Anytime the RRT is activated, an event summary will be prepared and distributed to all personnel by the RRT Coordinator. This summary will not be distributed until the event has been completely mitigated, all response efforts have ceased, and recovery is underway. The document will include a detailed recounting of the event including all data provided by RRT membership or auxiliary personnel. It will also include any known or suspected barriers to rapid and effective communication and response that were noted during the event. All personnel receiving this document will be asked to review the information and submit any comments, suggestions, or lessons learned about areas of the response where procedures could be improved or where existing communications/response were successful. The RRT Coordinator and Core Group will develop an After Action Report (AAR) and Improvement Plan to address opportunities noted in the response.



VIRGINIA DEPARTMENT
OF AGRICULTURE AND
CONSUMER SERVICES

The Virginia Department of Agriculture and Consumer Services (VDACS) promotes the economic growth and development of Virginia agriculture, provides consumer protection and encourages environmental stewardship.

VDACS is organized into Four Units:

- Commissioner's Office
- Division of Animal & Food Industry Services
- Division of Consumer Protection
- Division of Marketing & Development

VDACS administers a variety of Virginia laws and regulations that protect consumers and businesses. The Division of Animal & Food Industry Services administers laws and regulations designed to ensure the safety, wholesomeness and proper labeling of foods in Virginia.

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VDACS Food Safety Program

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VA. Rapid Response Team

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Office of Epidemiology

The Office of Epidemiology is comprised of five divisions: The Division of Surveillance and Investigation, the Division of Environmental Epidemiology, the Division of Disease Prevention, the Division of Immunization, and the Division of Pharmacy Services. The following Divisions are most relevant to the “**Water You Drinking**” tabletop exercise and the roles and responsibilities of these divisions include the following:

Division of Environmental Epidemiology (DEE)

- Issues human health advisories for events affecting public state waters. Often this is done in consultation with other agencies, offices, divisions of the Office of Epidemiology, and local health districts.
- Provides consultation during waterborne illness outbreaks or when there are release events to waters of the state with the potential for public health impacts for local health district or with other state partners.
- Subject matter experts regarding biological communicable contaminants including bacteria and toxins. Can assist with proper sampling protocols or can facilitate sampling assistance for some contaminants (bacteria, harmful algal blooms, toxins, etc.)

Division of Surveillance and Investigation (DSI)

- Provide guidance on surveillance laws, regulations, and methods to local health departments and healthcare providers
- Investigate potential clusters identified through laboratory-based surveillance
- Provide guidance to local health districts for investigations to prevent the spread of communicable diseases.
- Coordinate and contribute to the development of materials to inform healthcare professionals and the public on health issues of importance in Virginia
- Coordinate and augment local health department responses for outbreak investigation management
- Support state and local planning to prepare for and respond to communicable disease emergencies, such as pandemic influenza, bioterrorism events, and other widespread outbreaks

Joint roles - DEE/DSI

- During events/incidents, coordinate with CDC Waterborne Group (for example through an EPI-AID) and or EPA staff (for example where multiple states are impacted) for assistance with the event or to enhance coordination efforts. Requests may also be made for analytical assistance.
- Develop health messages & recommendations for the public, in partnership with VDH-Office of Risk Communications
- Consult with DCLS/other laboratories for appropriate collection of specimen/water samples and analyses

- Work with local health district communicable disease staff to coordinate human disease surveillance
- Communicate & coordinate with the local Health Director(s), VDH Offices, during investigation of public health events and implementation of contingency actions

Regulations:

- DEE – Closing of waters; modification or revocation of regulation or order
Code of Virginia 32.1 - 248
<http://law.lis.virginia.gov/vacode/title32.1/chapter6/section32.1-248/>
- DSI – Regulations for Disease Reporting & Control
Code of Virginia Section 32.1-36, 32.1-37; Board of Health Regulations 12 VAC 5-90-80, 12 VAC 5-90-90

<http://www.vdh.virginia.gov/content/uploads/sites/3/2016/03/Virginia-Reportable-Disease-List-October-2016.pdf>

Contacts:

OEPI-DEE

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- Waterborne Hazards Control Coordinator, Margaret Smigo
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OEPI-DSI

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Office of Environmental Health Services

The Office of Environmental Health Services (OEHS) provides leadership to the local health districts by directing the operation of environmental health programs (food and shellfish safety, tourism safety, childhood lead poisoning prevention, safe drinking water from private wells, and safe wastewater treatment and disposal). OEHS functions include developing policy; analyzing local, state and federal legislation; evaluating public health programs; providing liaison assistance; providing scientific and technical expertise; representing the agency in formal administrative proceedings involving the environmental health programs; and providing expertise in drafting, amending, administering and enforcing state environmental health regulations.

Local Health Department Environmental Health Programs

There are 34 local health districts in the Commonwealth that include environmental health offices overseen by an environmental health manager. They are responsible for permitting and inspecting food establishments (restaurants, and food service in hospitals, nursing homes, mobile food units, temporary events etc.), hotels and motels, campgrounds, summer camps, migrant labor camps, tourist establishment swimming pools, onsite sewage systems, and private wells.

Water Safety and Supply

Ensuring safe, potable water in an emergency or disaster is a critical function of environmental health programs in local health districts. Safe drinking water may include bottled, boiled, or treated water. Environmental Health in local health districts regulates the installation of private wells and the use of any water provided in restaurants, hotels and motels, campgrounds, summer camps, migrant labor camps, and swimming pools.

Emergency Response

In a major disaster such as a flood or hurricane, the public water supply could be damaged, interrupted, or contaminated. The mission of environmental health programs regarding permitted facilities is to:

1. Ensure that an adequate supply of safe, potable water is available.
2. Prevent outbreaks of waterborne diseases such as norovirus, cryptosporidium, dysentery, infectious hepatitis, and others.
3. Provide information to the public regarding potable water safety.

Priority Activities

Environmental Health may respond to an incident that poses a threat to both drinking water and recreational water safety and supply related to the affected regulated establishments. Several of these may be conducted by local utility departments, and not district environmental health professionals.

1. Conduct a rapid initial assessment to determine status of drinking water, water for handwashing, and sanitation.
2. Coordinate with the Office of Drinking Water to determine if non-public water service supply and/or quality has been or may become affected.
 1. In collaboration with the Office of Drinking Water, locate and arrange for the distribution of emergency potable water.
 2. Provide pre-prepared information to regulated food establishments, swimming pools, campgrounds, hotels and motels on water storage and disinfection.
 3. Update the VDH website to provide information to the public and regulated community on water storage and disinfection.
 4. Provide advice or assistance in the disinfection and decontamination of distribution systems, storage tanks, and water tanker trucks.
 5. Monitor and track affected regulated establishments regarding resumption and availability of potable water.

VIRGINIA DEPARTMENT OF HEALTH

Office of the Commissioner

